KEEPING YOUR REFINERY RIGHT ON SCHEDULE

How Scheduling Technology Increases Refinery Profitability and Efficiency
Stay competitive in today’s refining market.

**BUSINESS FIRST**

A refinery is an essential part of the downstream side of the petroleum industry. Oil and gas companies have spent a significant amount of money to build the assets that process and refine crude oil into useful products based on demand - and they expect a return on that investment.

**GAINING A COMPETITIVE ADVANTAGE**

Get the most out of your refinery and reduce pain points that diminish your throughput and product quality. Investing in best-in-class technology will streamline your business processes by helping to run your refinery efficiently while increasing profitability.
Are you achieving these goals at your refinery?

**Maximizing throughput**
Operate the refinery at full capacity to increase profitability.

**Minimizing downtime**
Address maintenance schedules and unexpected shutdowns for a more stable operation.

**Optimizing product blends**
Produce products with optimal crude and component recipes.

**Reducing off-spec product**
Meet market and regulatory requirements the first time.
Five signs you need scheduling automation in your refinery.

- **Failure to capitalize on spot crude cargos**
  Missed opportunities because of time-consuming crude evaluation.

- **Customer service declines**
  A lack of inventory when a sale opportunity arises.

- **Inefficiency and lost productivity**
  The scheduling creation is too labor intensive.

- **Lost quality**
  Suboptimal use of components that leads to inefficient blending and quality giveaway.

- **Significant off-spec production**
  A loss in profits due to stricter market and regulatory requirements.
Let scheduling technology optimize your refinery schedule.

EASILY MANAGE THESE FACTORS

- Cost of production (demurrage, holding costs and component stockouts)
- Compatibility between planning and scheduling
- In-transit inventory
- Simultaneous scheduling across multiple users
- Blend campaigns/recipes for on-spec assurance
What is scheduling optimization worth?

For a 200K/bbl refinery of medium complexity, advanced blending and scheduling improves profit margins by $0.10–$0.20 USD/bbl for an annual profit of $6–$14MM USD. Advanced blending and scheduling also provides the following:

- Reduced product quality giveaway
- Improved inventory management and logistic alignment
- Increased throughput
- Alignment between planning and scheduling
Conclusion

The refining market is ever-evolving with continuously changing market trends, environmental regulations and stricter product specifications. Best-in-class refinery scheduling technology has now become a must-have for refining companies to stay competitive in today’s market. Leading-edge refiners are gaining greater visibility across their entire supply chain from adopting advanced scheduling systems integrated with planning systems.

For more information:
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EXECUTIVE BRIEFING

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AspenTech is a leading supplier of software that optimizes process manufacturing—for energy, chemicals, engineering and construction, and other industries that manufacture and produce products from a chemical process. With integrated aspenONE® solutions, process manufacturers can implement best practices for optimizing their engineering, manufacturing, and supply chain operations. As a result, AspenTech customers are better able to increase capacity, improve margins, reduce costs, and become more energy efficient. To see how the world’s leading process manufacturers rely on AspenTech to achieve their operational excellence goals, visit www.aspentech.com.

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